

NEW SPECIES OF THE GENUS *MOLANNA* CURTIS FROM SULAWESI (TRICHOPTERA: MOLANNIDAE)

Neboiss, A., 1993. New species of the genus *Molanna* Curtis from Sulawesi (Trichoptera: Molannidae). – Tijdschrift voor Entomologie 136: 257-258, figs. 1-4 [ISSN 0040-7496]. Published 10 December 1993.

The description and figures of *Molanna jolandae* sp. n. are given. This is the second species recorded from Sulawesi, and extends the range of generic distribution to southern Sulawesi Tenggara.

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Key words. – Trichoptera; Molannidae; *Molanna*; Sulawesi; taxonomy.

The present paper is based on material recently collected in Sulawesi. Among the numerous specimens from a number of localities, members of the family Molannidae are scarce and have been collected at only one location. There is only one previous Sulawesi record, a single specimen on which the description of *Molanna cupripennis* Ulmer (1906) is based. The type locality 'Bonthain Peak' is in south-western Sulawesi (Sulawesi Selatan). The present material is from the southeastern part of the island (Sulawesi Tenggara) near Moramo (4°09'S 122°38'E). It may be noted, that the extensive collection from Dumoga Bone National Park in the north of the island (Sulawesi Utara), accumulated by the Wallace Expedition 1985, did not contain any specimens of *Molanna*.

MATERIAL AND METHODS

Specimens were prepared by clearing the abdomen in cold KOH solution, then transferring to glycerol for drawing and later storage in microvial. Drawings of genitalia were made with the assistance of a camera lucida on a Wild M20 compound microscope. The wings, prepared as temporary microscope mounts in glycerol, were examined and drawn using a Wild M8 dissecting microscope also equipped with camera lucida. All dissected and figured specimens are identified by the author's notebook number with prefix 'PT-...'. All specimens have been deposited in the National Museum of Natural History, Leiden, The Netherlands (RMNH).

TAXONOMIC PART

Molanna jolandae sp.n. (figs. 1-3)

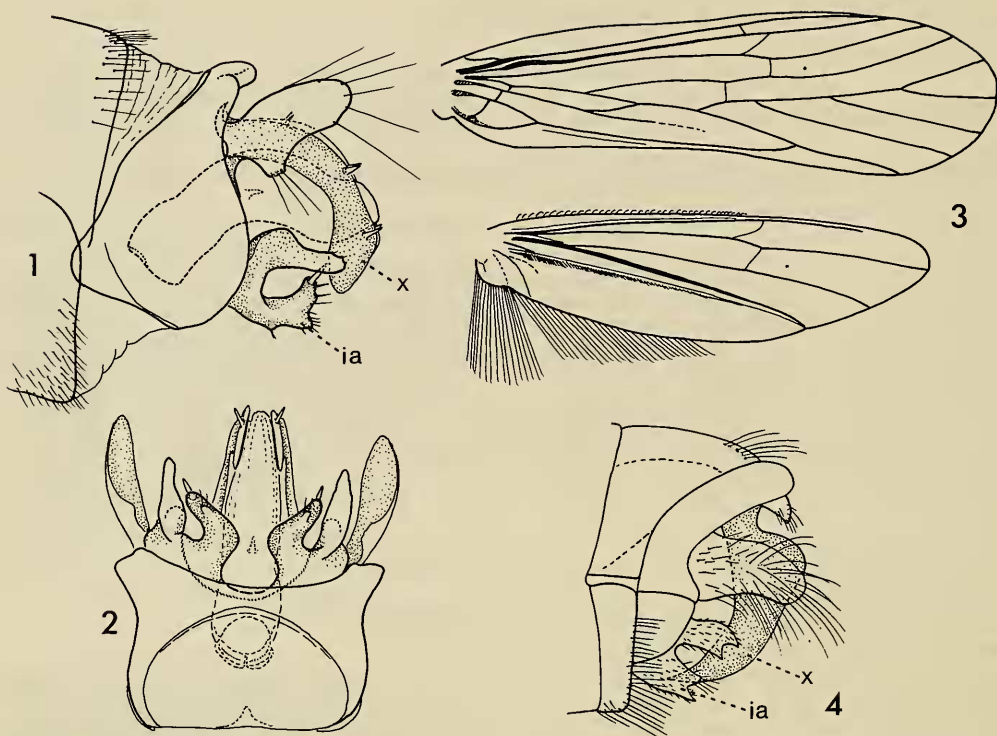
Type material. – Holotype ♂: Sulawesi Tenggara, Moramo (4°09'S 122°38'E), Sungai Sena, 50 m asl, 15 Nov 1989, R. de Jong and J. Huisman (site S 8946: mixed forest, dense undergrowth) in RMNH [Genitalia prep. PT-1968 figured, specimen dry mounted]. – Paratypes: Sulawesi Tenggara, Moramo, Sungai Moramo, 200 m asl, 16 Nov. 1989, at light, R. de Jong and J. Huisman, 2 ♂ (site S 8947: mixed forest, dense undergrowth) in RMNH [wing prep. PT-1969 figured; both specimens in alcohol].

Description

Wings slender, rounded apically (fig. 3), length ♂ 8.6-9.0 mm, densely covered with short, dark brown pubescence, hind wing anal margin with long, dark brown fringe, venation similar to that of *Molanna cupripennis* Ulmer.

Male. – Dark, blackish brown, antennae, maxillary and labial palpi as well as fore legs densely covered with coarse blackish brown hairs, mid- and hind-tarsi also covered with dark hairs, whereas femora and tibiae are pale yellow with scattered small, dark blackish semi-erect spines, apical spurs covered with dark hairs, preapical spurs with paler hairs.

Genitalia (figs. 1, 2) with abdominal segment IX in lateral view broadly rounded ventrally, mid-dorsal margin broad with slight mesal depression, anterolateral angles may be more or less produced. Superior appendages elongate ovoid, flattened, lower basal margin produced into an incurved lobe. Segment X large, extended and strongly curved ventrad, dorsomesally separated almost to the base, usually with three strong spines on dorsal margin on either side. Inferior



Figs. 1-4. *Molanna* species. — 1, *M. jolandae* sp. n., male genitalia (holotype), lateral; 2, ventral; 3, wing venation (paratype); 4, *M. cupripennis* Ulmer, male genitalia lateral (from Ulmer 1951).

appendages short, two branched, lower branch with terminal half curved dorsad, a distinct spine apically, upper branch directed posteriorly, slightly concave, apex rounded. Phallus short, rather robust, strongly curved, membranous, small chitinous spine internally.

Female unknown.

Remarks

This species is very similar to *Molanna cupripennis* Ulmer, but, besides being smaller (length of forewing 9 mm instead of 14 mm), differs by the presence of spines on segment X, and the shape of the inferior appendages, the branches of which are not incised apically. The figures by Ulmer (1906, 1951) (here reproduced as fig. 4) also show notable differences in shape and position of segment IX and the superior appendages.

Etymology. — The species is named after Jolanda Huisman in recognition of her efforts gathering ex-

tensive material of Trichoptera from many localities in Sulawesi.

ACKNOWLEDGEMENT

I wish to express my sincere thanks to Jan van Tol of RMNH Leiden for access to this most interesting material.

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Received: 16 March 1993

Accepted: 15 April 1993